



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0409; Directorate Identifier 2011-SW-055-AD;

Amendment 39-17020; AD 2011-18-52]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Helicopters

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are publishing a new airworthiness directive (AD) for certain Agusta S.p.A. (Agusta) Model AB139 and AW139 helicopters that requires establishing a revised life limit for each tail rotor (T/R) blade and updating the helicopter's historical records, repetitively inspecting T/R blades for a crack, and replacing certain T/R blades. This AD is prompted by a fatal accident involving an Agusta Model AW139 helicopter, which may have been caused by cracks in a T/R blade. These actions are intended to detect and prevent a crack in a T/R blade, which could lead to failure of a T/R blade and subsequent loss of control of the helicopter.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2011-18-52, issued on August 25, 2011, which contained the requirements of this AD.

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

EXAMINING THE AD DOCKET: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bullettins>. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Jim Grigg, Manager, FAA, Safety Management Group, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone: (817) 222-5112; fax: (817) 222-5961; email jim.grigg@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

On August 26, 2011, we issued Emergency AD No. 2011-18-52 for the Agusta AB139 and AW139 helicopters. The Emergency AD incorrectly lists the effective date as August 26, 2011, when the correct date is August 25, 2011, which is the issue date listed above the signature block. That Emergency AD requires establishing a revised life limit

for each T/R blade and updating the helicopter's historical records, repetitively inspecting T/R blades for a crack, and replacing certain T/R blades. That action was prompted by a fatal accident involving an Agusta Model AW139 helicopter, which may have been caused by cracks in a T/R blade. This condition, if not detected and corrected, could result in failure of a T/R blade and subsequent loss of control of the helicopter.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency AD No. 2011-0156-E, dated August 25, 2011, to correct an unsafe condition for the Agusta Model AB139 and AW139 helicopters. EASA advises that in early 2011, there was a reported occurrence of T/R dynamic "unbalance" on a Model AW139 helicopter. Pending the results of the investigation into that occurrence, EASA issued AD No. 2011-0081, dated May 9, 2011, to require, as a precautionary measure, repetitive inspections of the T/R blades. After that AD was issued, a fatal accident occurred with another Model AW139 helicopter on August 19, 2011, possibly caused by cracks in a T/R blade. EASA advises that this condition, if not detected and corrected, could lead to a T/R structural failure, resulting in loss of control of the helicopter.

FAA's Determination

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in their AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs. This AD contains minor editorial changes

but is otherwise consistent with the Emergency AD, and will neither increase to economic burden on any operator nor increase the scope of the Emergency AD.

Related Service Information

Agusta has issued Mandatory Bollettino Tecnico (BT) No. 139-265, dated August 25, 2011 (BT No. 139-265), which supersedes Agusta BT No. 139-251, dated May 6, 2011, for the Model AB139 and AW139 helicopters. The BT specifies, within 25 flight hours and at subsequent intervals of every 25 flight hours thereafter, visually inspecting the T/R blades, part number (P/N) 3G6410A00131 or P/N 4G6410A00131, for a crack or signs of damage using a mirror, magnifying glass (5X or greater), and a “hand torch” (flashlight). If there is a crack or signs of damage, the BT specifies sending the damaged blade along with certain data to the manufacturer. In addition, for helicopters with more than 600 flight hours or more than 1,500 landings, whichever occurs first, the BT specifies replacing the T/R blades with blades that have less than 600 flight hours and less than 1,500 landings. The BT specifies sending certain data to the manufacturer regarding the removed T/R blades. EASA classified the BT as mandatory and issued Emergency AD No. 2011-0156-E, dated August 25, 2011, to ensure the continued airworthiness of these helicopters.

AD Requirements

For Agusta Model AB139 and AW139 helicopters with a T/R blade, P/N 3G6410A00131 or 4G6410A00131, this AD requires:

- Within 5 hours time-in-service (TIS), establish a life limit of 600 hours TIS or 1,500 takeoff and landing cycles (cycles), whichever occurs first, on the affected T/R blades and update the helicopter’s historical records. If a T/R blade’s total number of

cycles is unknown, determine the T/R blade cycles by multiplying the T/R blade's hours TIS by 4.

- For a T/R blade that, on the effective date of this AD, has already exceeded 600 hours TIS or 1,500 cycles, within 5 hours TIS replace the T/R blade with an airworthy T/R blade.

- Within 25 hours TIS, and thereafter at intervals not to exceed 25 hours TIS, visually inspect the T/R blade for a crack or damage that exceeds the limits of the applicable maintenance manual. Inspect the T/R blade using a mirror, magnifying glass (5X or greater), and light source; or borescope.

- If there is a crack, or if there is damage that exceeds the limits of the applicable maintenance manual, before further flight, replace the T/R blade with an airworthy T/R blade.

Differences between this AD and the EASA AD

The AD differs from the EASA AD in that we use the term “take-off and landing cycles” and EASA uses the term “flight cycles.” In addition, we use the term “hours time-in-service” to describe compliance times, and EASA uses “flight hours”. EASA's AD requires you to contact the manufacturer if there is a crack in a T/R blade, and our AD does not require that action. Finally, our AD requires, within 5 hours TIS, replacing a T/R blade that has exceeded the newly revised life limits. EASA's AD requires replacing the T/R blade within 5 flight hours or 30 days, whichever occurs first.

Interim Action

We consider this AD to be an interim action. If final action is later identified, we might consider further rulemaking.

Costs of Compliance

We estimate that this AD will affect 46 helicopters of U.S. Registry.

We estimate that operators may incur the following costs in order to comply with this AD: each inspection will take 1 work-hour and a blade replacement will take 8 work-hours. Required parts will cost about \$35,000 per T/R blade. Based on these figures, we estimate the total cost impact of the AD on U.S. operators to be \$237,050, assuming all T/R blades will require 15 recurring visual inspections, a one-time inspection, and that 5 T/R blades are replaced.

FAA's Justification and Determination of the Effective Date

The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the structural integrity and controllability of the helicopter. Therefore, the actions previously described are required at the specified intervals, and this AD must be issued immediately.

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD effective immediately by individual letters issued on August 26, 2011 to all known U.S. owners and operators of Agusta Model AB139 and AW139 helicopters. These conditions still exist, and the AD is hereby published in the **Federal Register** as an amendment to 14 CFR 39.13 to make it effective to all persons.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

“Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2011-18-52 **AGUSTA S.p.A. (AGUSTA)**: Amendment 39-17020; Docket No. FAA-2012-0409; Directorate Identifier 2011-SW-055-AD.

(a) Applicability.

This AD applies to Agusta Model AB139 and AW139 helicopters, with a tail rotor (T/R) blade, part number (P/N) 3G6410A00131 or P/N 4G6410A00131, certificated in any category.

(b) Unsafe Condition.

This AD defines the unsafe condition as cracks in a T/R blade. The actions in this AD are intended to detect and prevent a crack in a T/R blade which could lead to failure of a T/R blade and subsequent loss of control of the helicopter.

(c) Effective Date.

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to all persons except those persons to whom it was made immediately effective by Emergency AD 2011-18-52, issued on August 25, 2011, which contained the requirements of this AD.

(d) Compliance.

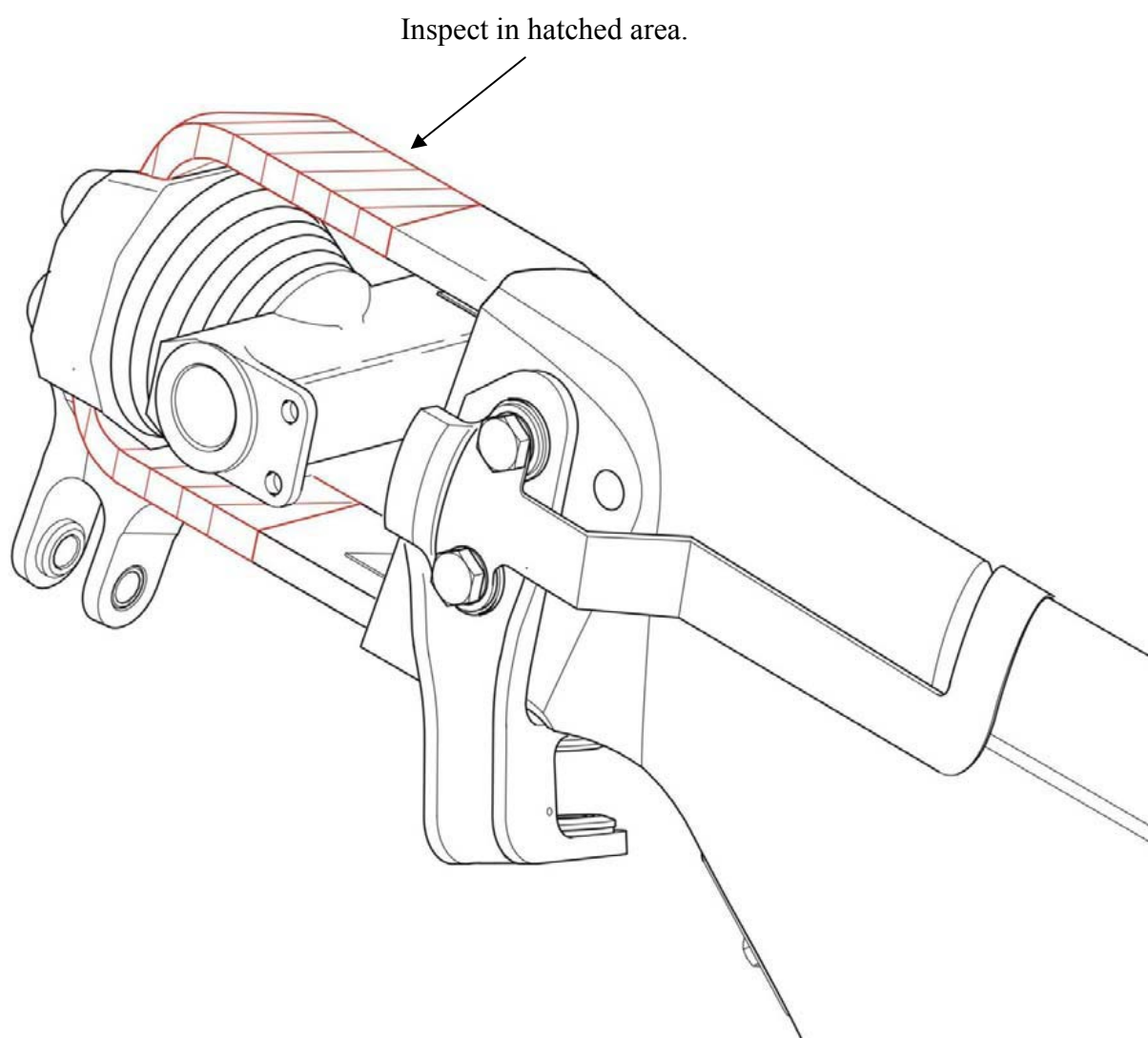
You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions.

(1) Within 5 hours time-in-service (TIS), establish a life limit of 600 hours TIS or 1,500 takeoff and landing cycles (cycles), whichever occurs first, on the affected T/R blades and update the helicopter's historical records. If a T/R blade's total number of cycles is unknown, determine the T/R blade cycles by multiplying the T/R blade's hours TIS by 4.

(2) For a T/R blade that, on the effective date of this AD, has already exceeded 600 hours TIS or 1,500 cycles, within 5 hours TIS replace the T/R blade with an airworthy T/R blade.

(3) Within 25 hours TIS, and thereafter at intervals not to exceed 25 hours TIS, visually inspect the T/R blade for a crack or damage that exceeds the limits of the applicable maintenance manual. Inspect in the area depicted in the following figure using a mirror, magnifying glass (5X or greater), and light source, or borescope.



(4) If there is a crack, or if there is damage that exceeds the limits of the applicable maintenance manual, before further flight, replace the T/R blade with an airworthy T/R blade.

(5) This AD revises the Airworthiness Limitations section of the maintenance manual by reducing the life limit of the T/R blade to 600 hours TIS or 1,500 cycles.

(f) Special flight permits.

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the requirements of this AD can be accomplished provided that there is minimal flight crew and there are no passengers.

(g) Alternative Methods of Compliance (AMOCs).

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Jim Grigg, Manager, FAA, Safety Management Group, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone: (817) 222-5112; fax: (817) 222-5961; email jim.grigg@faa.gov.

(2) For operations conducted under a Part 119 operating certificate or under Part 91, Subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(h) Additional Information.

(1) Agusta Mandatory Bollettino Tecnico No. 139-265, dated August 25, 2011, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Agusta Westland,

Customer Support & Services, Via Per Tornaento 15, 21019 Somma Lombardo (VA)
Italy, ATTN: Giovanni Cecchelli; telephone 39 0331-711133; fax 39 0331 711180; or at
<http://www.agustawestland.com/technical-bullettins>. You may review a copy of the
service information at the FAA, Office of the Regional Counsel, Southwest Region,
2601 Meacham Blvd., Room 663, Fort Worth Texas 76137.

(2) The subject of this AD is addressed in European Aviation Safety Agency
(Italy) AD No. 2011-0156-E, dated August 25, 2011.

(i) Subject.

The Joint Aircraft Service Component (JASC) Code is: 6410: Tail Rotor Blade.
Issued in Fort Worth, Texas, on April 10, 2012.

Lance T. Gant,

Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2012-9315 Filed 04/17/2012 at 8:45 am; Publication Date: 04/18/2012]